

Notice of Allowability

Application No.

10/644,341

Examiner

Felix E. Suarez

Applicant(s)

FORSTER ET AL.

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to response filed 10 May 2006.
2. ☒ The allowed claim(s) is/are 1,3-6,8-20, 22-27 and 29-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 3-6, 8-20, 22-27 and 29-32 are allowable.
2. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1, 3-6, 8-20, 22-27 and 29-32 are allowable because the prior art, particularly Kozaki et al. [U.S. Patent No. 5,004,264] (hereafter Kozaki), Tomita [U.S. Patent No. 4,545,257], Assenheimer et al. [U.S. Patent No. 4,112,879] (hereafter Assenheimer), Conrad et al. [U. S. Patent Application Publication No. 2002/0060175] (hereafter Conrad), Zdrojkowski et al. [U.S. Patent Application Publication No. 2005/0224078] (hereafter Zdrojkowski) and Antony et al. [U.S. patent No. 5,805,452] (hereafter Antony) fail to teach or suggest a method of determining the service life of a fluid power cyclic system comprising the steps of;

applying the flow rate to an algorithm in which the characteristic value is integrated over the cycle time to determine a diagnostic value; nor comparing the diagnostic value to a predetermined value to determine the service life status of the cyclic system.

Kozaki Tomita, Assenheimer, Conrad, Zdrojkowski and Antony also fail to teach or suggest a method (or system) of determining the service life of a cyclic fluid power system comprising the step of:

comparing the diagnostic value to a predetermined value to determine an operational (or a performance) status of the system relating to the service life of the cyclic fluid power system.

Kozaki Tomita, Assenheimer, Conrad, Zdrojkowski and Antony also fail to teach or suggest an apparatus (or system) for determining an operational status of a cyclic fluid power system comprising:

a calculating unit operatively connected to the sensor, the calculating unit including circuitry for performing a mathematical integration on the system characteristic to determine a diagnostic value and comparing the diagnostic value to a predetermined value to determine the performance status of the system;

evaluating the diagnostic value over a plurality of system cycles to determine a change in the diagnostic value;

evaluating the cycle time over a plurality of system cycles to determine a change in the cycle time; nor

comparing the change in diagnostic value to the change in the cycle time to determine the operational status of the system.

Conclusion

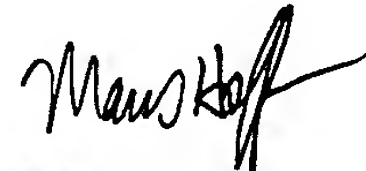
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

Art Unit: 2857

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular communications and for After Final communications.

June 6, 2006

F.S.



MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800